

**COUNTY OF SUFFOLK
ADDENDUM NO. 2
REQUEST FOR EXPRESSION OF INTEREST (RFEI)**

**PHASE II DEMONSTRATION OF (I/A OWTS)
INNOVATIVE ALTERNATIVE ONSITE WASTEWATER TREATMENT SYSTEMS
IN SUFFOLK COUNTY**

&

**A DEMONSTRATION OF PRESSURIZED SHALLOW DRAINFIELD
OPTIONS IN SUFFOLK COUNTY**

PURPOSE OF ADDENDUM

**Response to Questions
Clarification of Type 2 – County/State Facilities Demonstration Program
Phase I Demonstration Program Vendor Summary**

I/A OWTS RFEI QUESTIONS AND RESPONSES

Question 1: Will SCDHS be responsible for submitting samples collected in the first 6 months to the analytical laboratory selected by the manufacturer?

SCDHS will sample the system monthly until the system reaches “steady state” and continue monthly sampling for 6 months. Suffolk County will process the samples through the end of the 6 month evaluation.

Question 2: Can you provide more information on the statistics SCDHS will use to evaluate the 75% and 90% expected level of treatment?

75% of the demonstration technology will need to meet a 6-month rolling average of 19 mg/l or better in order to receive Provisional Use Approval. 90% of a minimum of 25 systems will need to meet a 12-month rolling average of 19 mg/l or better in order to receive General Use Approval.

Question 3: Can applicants reserve the right to reject a site that has a block system that has to be replaced?

SCDHS will closely work with applicants on site selection

Question 4: Suffolk County appears to have differing insurance requirements for different types of contracts. Can you specify the insurance requirements that apply to this solicitation?

Installers will need to have a current liquid waste license issued by the SC Department of Labor, Licensing and Consumer Affairs. Currently, Liquid Waste License Holders are required to have

liability and property damage insurance in the minimum amount of one million dollars (\$1,000,000.00) combined single limit.

Question 5: When does Suffolk County anticipate adopting an enabling regulation to allow the installation of I/A OWTS within the County? Does the County foresee such regulation at the County level being sufficient as a stand-alone, or will parallel regulations be necessary at other governmental levels? The purpose of this question is to understand potential obstacles that I/A OWTS might face in transitioning from pilot to provisional to general approval status.

SCDHS is currently revising sanitary code and residential standards to allow for as-a-right installation of I/A OWTS. The goal is to have these regulations adopted by July 1st 2016. New York State DOH regulations already allow nitrogen reducing Enhanced Treatment Units (ETU). This will allow Suffolk County to revise the Suffolk County Sanitary code to accept I/A OWTS without any changes to state regulations.

Question 6: what type of sampling is requested during the Piloting stage? Grab or 24 hour composite samples?

SCDHS will sample the system monthly until the system reaches “steady state” using grab samples and continue monthly grab and composite sampling for 6 months.

Question 7: Can you also confirm the sampling frequency? It is not clear to us if sampling shall be performed on a monthly as is as mentioned in page 5 of the RFEI or quarterly as mentioned in page 19?

Demonstration systems will be subject to Monthly sampling during the piloting phase and quarterly sampling during the provisional phase.

Question 8: If we provide a system for the demonstration program can you provide Applicants with a list of contractors / designers that we can work with?

The County intends to provide a list of companies that have Liquid Waste licenses. The applicants will have to contact the licensees to determine which of these companies perform septic system installations and may be qualified to install an I/A OWTS.

Question 9: What is the site selection process? Are the sites assigned to us by the County? Is this process depending if the applicant system is at piloting state or provisional approval?

SCDHS will closely work with applicants on site selection. All demonstration systems are going in as “pilot systems”. Once 75% of the demonstration technology meets a 6-month rolling average of 19 mg/l or better the technology will be granted Provisional Use Approval.

Question 10: Does the effluent of the system need to be pressurized or dispersed by gravity? Is there something in Suffolk County regulation regarding effluent disposal or would this be site specific?

The effluent does not need to be pressurized. However, the county is also conducting a demonstration program of Pressurized Shallow Drainfields (PSD's). I/A OWTS and PDS will be paired on some of the installations.

Question 11: Our understanding of the process is that we will have to successfully complete the Piloting Stage of 6 months, performed on at least 1 system and up to 3 systems (donated) before getting provisional approval after which in order to complete the provisional and get general approval a total of 25 systems will have to be monitored for an 18 month period. Under provisional approval are we limited to the total of 25 systems initially permitted?

SCDHS will not limit Provisionally Approved Technologies to only 25 systems. The first 25 systems will require quarterly sampling.

Question 12: Regarding the 200,000 failing system in the county, what is the proportion that requires Nitrogen removal?

There are 365,000 onsite residential sanitary disposal systems in Suffolk County. 209,000 are considered priority systems for replacement. Although, there is no current policy for replacing these systems, we envision that all of these systems in priority areas would benefit from Nitrogen Reducing Technologies. Question 13: How does the County plan to enforce replacement of these failing systems? What is the timeline to implement such an action plan?

There is no current requirement to replace failing systems with I/A OWTS. This is currently one of the policy decisions Suffolk County is considering. .

Question 14: Is there a status report available for the RFEI Phase 1?

There were 4 manufactures representing 6 different technologies in Phase 1. A total of 19 systems were donated. The final system from Phase 1 will be installed in April 2016. A status report is not currently available.

Question 15: Could you help Applicants pin down costs associated with installation, design, and maintenance of these systems?

SCDHS may make the approximate phase 1 design, installation, and maintenance costs available

Question 16: What happens to residential properties if the installed I/A OWTS fails to perform and meet the standards? Will the Homeowners need to have the I/A OWTS removed and another sanitary system installed?

If the technology fails to meet standards to be granted Provisional Use Approval, additional systems will not be permitted. As long as the system is functioning hydraulically we do not intend to require that the I/A OWTS be removed.

Question 17: There can be quite a bit of variation of a system due to the size of the home and other factors. Should we submit the estimated for a typical three bedroom home with a standard system with the understanding that the costs for the final project selected could be significantly different?

Yes, please submit estimates for a typical residential system.

Question 18: Will the requirements for installation be the tank and ATU and not the leachfield?

If a block cesspool is present, the applicant will be responsible for filling the block cesspool and installing a conventional leachfield.

Question 19: The RFEI states that the SCDHS will be responsible for collecting samples during the first six months and the applicant will be responsible for any additional sampling requirements. Could you please clarify if this means that the applicant will begin sampling after the initial six month period or if there will be other sampling requirements that the applicant will be responsible for during that initial six month period? What are the BOD and TSS requirements?

The applicant is expected to begin sampling after SCDHS completes the first 6 months of composite samples. The applicant is expected to sample BOD, TSS, pH, DO, Alkalinity, Ammonia, Nitrite, Nitrate, TN, and TKN.

Question 20: Does the 25 systems installed under the Provisional Use Approval include the first units installed under the Piloting Approval?

Yes, it refers to total number of systems installed.

Question 21: If a provisional Use Approval has been granted but after one year Suffolk County determines that a technology does not meet the requirements and additional units and units have been installed, what is the responsibility of the manufacturer for these systems?

The manufacturer can make necessary improvements to the technology and continue sampling the systems. If the manufacturer does not make improvements no additional permits will be granted. The manufacturer will be responsible to honor the warrantee and subsequently to continue to offer service contracts to the owner.

Question 22: The RFEI states that 18 months of sampling is required for systems installed under the Provisional Use Approval. Once a technology meets the requirements and General Use Approval/Certification is granted then these and any other systems installed must be sampled once every 36 months. The only systems that have to be sampled quarterly for 5 years is the system(s) installed under the Piloting Approval. Is this correct?

The Sampling requirements change as the technology progresses through the approval process. Monthly sampling is required for piloting, quarterly sampling for provisional, and sampling every 36 months is proposed for general use approval.

Question 23: What is the process that will be used if a homeowner refuses to allow sampling and/or servicing of a unit installed under any approval including Piloting?

SCDHS is proposing changes to the Sanitary Code to allow the Department to function as a Responsible Management Entity to oversee I/A OWTS installations and ongoing O&M. Local Health

Departments have enforcement authority granted under New York State Public Health Law.

Question 24: Is there any financial assistance for the homeowner for the costs associated with abandoning an individual cesspool?

All costs are to be incurred by the applicant. No additional assistance is available at this time.

Question 25: If unexpected costs are incurred outside of the RFEI requirements, who is responsible for covering those costs?

We do not anticipate selecting sites that will require additional costs that are outside of the RFEI requirements.

Question 26: Can Suffolk County provide a signed confidentiality agreement agreeing that financials will not be disclosed or subject to FOIL?

If any of the information you provide is considered a trade secret, whether part of submitted financial statements or otherwise, please indicate particular information in your responses and that information will be kept confidential. Please refer to section C. Confidentiality on page 22 of the RFEI. We will keep legitimate confidential information confidential under the NYS Freedom of Information Law. Please note if your firm desires to continue in this RFEI process, submission of the financial statement to prove the economic viability and ability to perform under this demonstration project is required at this time.

PSD QUESTIONS AND RESPONSES

Question 1: Can we add SPDS (PSD) Technology to one of our installed TN reducing Systems?

SCDHS would require written permission from the property owners.

Question 2: How will the sampling take place? Frequency? Does the whole drainfield need to be lined?

Sampling is optional. SCDHS is interested in the hydraulic function of the system and would require monitoring ports be installed.

Question 3: Can we determine our own loading rates using our soil infiltration test kit?

Leachfields must be sized in accordance with NY Appendix 75-A. However, applicants can propose dosing only a portion of the leachfield for testing purposes.

Question 4: Are you only looking at TN, BOD, and TSS? As it is likely that Nitrates and FC will be reduced in the soil?

Sampling is optional. SCDHS is interested in the hydraulic function of the system and would require monitoring ports be installed.

Question 5: With regards to the REFI, Part B, g) 3 (top of page 10) states: “3. A table detailing typical loading rates per soil type and / or percolation rate.”. Will loading rates other than specified by Appendix 75A be able to be proposed?

Leachfields must be sized in accordance with NY Appendix 75-A. However, applicants can propose dosing only a portion of the leachfield at higher loading rates for testing purposes.

Question 6: What is the actual “nitrogen reduction objective” for the pressurized shallow drainfield (PSD) option?

Nitrogen reduction is not required but considered an “added benefit” to pretreatment.

Question 7: What is the desired outcome for the PSD option if the drainfield is connected to a nitrogen-reducing treatment system that already meets the water-quality parameters required by the county?

Nitrogen reduction is not required but considered an “added benefit” to pretreatment. SCDHS is interested in the hydraulic function of the system and would require monitoring ports be installed.

Question 8: What depth below the infiltrative surface is regarded as the required point of compliance for the pressurized drainfield option?

SCDHS would like to see the PSD installed within the top 18 – 24 inches of the soil profile to encourage microbial uptake of pretreated effluent.

Question 9: The information states that Suffolk County will be responsible for “evaluation of monitoring and performance, and creating and maintaining a data base of the analytical results of system monitoring.” Who does (and therefore pays for) the monitoring itself?

The applicant is expected to pay for the monitoring. SCDHS and /or project partners may also wish to monitor and / or sample the monitoring at their own expense.

Question 10: REFI, Part B, g) 5., states: “... Systems may be sampled on a routine basis by a NYS...” How often? What is the sampling schedule?

Sampling is optional. SCDHS is interested in the hydraulic function of the system and would require monitoring ports be installed. Monthly monitoring is expected during the first 12 months.

Question 11: Sampling data: will the manufacturer receive copies of the sampling data? And from the treatment system associated to the PSD? (Then the quality of the effluent entering the PSD can be known)

Applicants will be sent copies of all monitoring and sampling results.

Question 12: REFI, Part B, g) 6., states: “ ... Please include detailed design of any proposed lysimeters.” The lysimeter design should be standardized for the demonstration program. The design should be

defined by Suffolk County so that they are feasible: to be sampled easily, to be able to collect a representative sample, standardize depth, location and number of lysimeters per site. This would strengthen the program to remove the possible significant differences from site to site (remove sampling error), and also allow the field technician (the sampler) to be consistent with sample collection.

There are currently no plans to require lysimeters or sampling for PSD's. This is something the County and project partners may discuss prior to site selection.

Question 13: For companies offering multiple models of functionally equivalent product that may have different width, length, or height (e.g., gravelless leaching chambers), what would the manufacturer be required to show in order to have all models approved for general use?

Systems not meeting NYS Appendix 75-A would have to demonstrate that the systems can function hydraulically for a period of 12 months prior to SCDHS Approval. SCDHS is subject to the laws of NYSDOH.

Question 14: If a technology has been vetted by the NYSDOH as part of a previous rulemaking process, is currently described in Appendix 75-A, and is used without limitation statewide, then why would that technology need to be tested as part of this demonstration program?

There are very few 75-A systems installed in Suffolk County. This program would offer manufactures the ability to showcase their 75-A systems to local installers and design professionals.

Question 15: How are decisions being made in terms of participating companies, and later, successful performance of a technology leading to acceptance by the county? Is it one individual, a panel, county staff, outside individuals, etc.? Does the manufacturer have the opportunity to interact with the decision-makers?

Representatives from SCDHS , the Department of Public Works and the Department Economic Development and Planning and will evaluate participating companies. SCDHS will make decisions regarding the successful performance of a specific technology. Suffolk County plans to interact with applicant companies throughout the process in order to promote successful demonstrations of the I/A OWTS.

Question 16: Will the PSD manufacturer be involved in the site selection?

SCDHS will closely work with applicants on site selection.

Question 17: If an installed system is not functioning properly, does the manufacturer have the authority to conduct an investigation of that wastewater system, including an examination of household activities, measurement of daily wastewater flow, an any other reasonable activities that would be warranted to assess the situation?

SCDHS would expect the manufacturer to investigate the cause of the malfunction provided the property owner is willing to participate in the process. Note that any investigation must be coordinated with SCDHS.

Question 18: 5-year maintenance/service contract: the manufacturer cannot guarantee performance; what if the treatment system malfunctions and solids are flushed out to the drainfield (PSD), clogging the soil pore space and rendering the system inoperable? What if the homeowner abuses the system, which is common? How will the county address such a situation?

The pretreatment system will be subject to routine sampling, inspection, and maintenance and SCHDS will note if there is an issue with the effluent entering the PSD.

Question 19: Can details be forwarded on the manufacturer, make, and model of the 19 systems approved from Phase I? This would allow a better understanding of the demonstration project goals.

This information is attached to this addendum.

Question 20: Can the county provide a list of experienced on-site wastewater professional engineers?

The County intends to provide a list of companies that have Liquid Waste licenses. The applicants will have to contact the licensees to determine which of these companies perform septic system installations and may be qualified to install an I/A OWTS.

Question 21: Many privately held companies have policies prohibiting the public disclosure of financial information, including financial statements, even when labeled as a trade secret or confidential in a regulatory agency's files. Will Suffolk County accept an "auditor's opinion statement" from a Big Four independent auditor? An auditor's opinion statement is signed by an independent accountant outlining their opinion regarding the quality of information containing in a company's financial reports and records.

No – Applicants must provide financial documentation as specified in RFEI. We believe an Auditors opinion statement would be insufficient.

Question 22: In lieu of assessing the financial state of manufacturers, South Carolina and Virginia have required companies to provided financial assurances in the form of a letter of credit for certain onsite wastewater system product approvals. Has Suffolk County considered that option as a hedge against future financial difficulty by an approved manufacturer?

Applicants must provide financial documentation as specified in RFEI

Clarification
Type 2 – County/State Facilities Demonstration Program

The Type 2 (County / State Facilities Demonstration Program) are ideal for the demonstration of more experimental technologies designed to reduce TN to a minimum of 19 mg/L that are: not yet certified by ETV/NSF 245 for testing, or do not yet have NSFANSI 40 certification, and are not yet approved for 19 mg/l TN in a minimum of three (3) other jurisdictions in similar climate conditions. Type 2 systems may be demonstrated at a limited number of County or State owned **residential** properties and will be subject to the SCDHS full approval model. **Applicants are expected to pay all installation costs associated with their technology. The Property owners are not expected to incur any costs as part of the demonstration program.**

PHASE I DEMONSTRATION PROGRAM TECHNOLOGY SUMMARY

1.1 ORENCO AdvanTex AX-20RT



1.2 ORENCO AdvanTex AX20



2.1 NORWECO Singlair TNT



2.2 NORWECO Hydro-Kinetic



3. BUSSE MF



4. HYDRO-ACTION AN SERIES

